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CONTENTS.

CLINICS.		Transformation of Urea into Carbonate of Ammonia in the System	10
CLINICAL LECTURES.		Vaso-Motor Nerves	10
Two Lectures on the Laryngoscope	1	Capacity of the Lungs	10
HOSPITAL NOTES AND OBSERVATIONS.		Demonomania	10
Left Hemiplegia, with Loss of Speech and Epileptic Convulsions—Recovery	6	Putrid Infection	11
MEDICAL NEWS.		Eucleation of Eyes	11
Domestic Intelligence.—Ligature of the Common Carotid Artery	8	Treatment of certain Surgical Cases in Tents	11
American Medical Association	8	Propagation of Puerperal Fever by Accouch-eurs	12
Mütter Lectures on Surgical Pathology at the College of Physicians of Philadelphia	9	Hospital Hygiene	13
Berkshire Medical College	9	Endurance of Human Life	13
Medical College of Ohio	9	Continued Fever in London	13
Dr. Marion Sims	9	Typhus in Liverpool	13
Foreign Intelligence.—Physiological Study of Opium	9	Establishment for Propagating Cowpox amongst Heifers	14
Elimination of Medicaments with the Perspiration	9	Liquefaction of Protoxide of Nitrogen	14
JONES ON FUNCTIONAL NERVOUS DISORDERS.		Ozone Tests and Readings	14
		Mortality of Black Troops in the British Service	15
		Instruction of the Deaf and Dumb	15
		Homœopathic Globules	15
		JONES ON FUNCTIONAL NERVOUS DISORDERS.	16 PAGES.

CLINICS.

CLINICAL LECTURES.

Two Lectures on the Laryngoscope. Delivered at the Royal College of Physicians. By GEORGE JOHNSON, M. D., Prof. of Medicine in King's College, &c. &c.

MR. PRESIDENT AND GENTLEMEN: The object of the two lectures which, by your appointment, sir, I am to deliver in this room, may be stated in a very few words. Some amongst the Fellows of the College having given their attention to the subject of the laryngoscope, and having formed a high estimate of the value of the instrument as an aid in the diagnosis and treatment of disease, desire that it should, as speedily as possible, come into general use. They wish to combat the notion that the art of laryngoscopy is so difficult that it can be successfully practised only by a select few, who would make of it a speciality. They, on the contrary, believe that the difficulties which attend the use of the laryngoscope are

few, and for the most part such as may be easily overcome by a very moderate amount of practice and perseverance; and they have thought that good might result from the subject being brought before the college by one of their body, who having no claim to the possession of a special knowledge of the art or of particular aptitude for its practice, but having studied and practised it in the ordinary course of his daily work, is willing to communicate the results of his experience, and anxious that others should share with him the pleasure and advantage of possessing a new instrument for exploring a large and important class of diseases.

And now, what is the laryngoscope? The laryngoscope is a small mirror, fixed on a stem or handle of convenient length. This mirror having first been warmed to prevent the dimming of its surface by the patient's breath, is placed in such a position obliquely beneath the palate that, while it reflects the light from the mouth into the larynx, it reflects back an image of the larynx to the

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VOL. XXIII.—1

eye of the observer. There are various means, as we shall presently see, for throwing a strong light upon the mirror, but the laryngoscope is simply a small looking-glass—a contrivance, “whose end is to hold, as ‘twere, the mirror up to nature.”

Now, it appears not a little remarkable that a method of exploring the larynx at once so simple and so effectual should not have come earlier into use—that it should have been reserved for the workers of the present time to devise a plan by which literally a new light has been thrown upon a very common, painful, and fatal class of diseases.

And here, it will not, I think, be a departure from the strictly practical design of my lectures if I allude very briefly to the history of this invention, indicating the attempts to examine the larynx which have from time to time been made by various observers, and the successive steps by which the art of laryngoscopy has been improved and simplified.

Attempts to examine the larynx by means of a mirror have, at different times, been made independently by various experimenters. One of the first, if not the very earliest, of these attempts was made by a distinguished Fellow of this college—I mean Dr. Babington, who showed his instrument at a meeting of the Hunterian Society in March, 1829—i. e., thirty-five years ago. The instrument was essentially the same as that now in use, and the following description of it was published in the third volume of the *Medical Gazette*, p. 555. “It consisted of an oblong piece of looking glass set in silver wire with a long shank. The reflecting portion is placed against the palate, whilst the tongue is held down by a spatula, when the epiglottis and the upper part of the larynx become visible in the glass.” The report adds that “the doctor proposed to call it the *glottiscope*.” Dr. Babington afterwards had his mirror made of polished steel, and in one he combined a tongue-depressor with the mirror. He also had one mirror of ovoid shape, which was convenient for use when the tonsils were enlarged. Dr. Babington tells me that he was in the habit of illuminating the throat by reflecting the light of the sun from a mirror held in the left hand. It was long after Dr. Babington had published the account of his glottiscope that Mr. Liston, in his *Practical Surgery*

(1840), referred to the use of a dentist’s mirror for obtaining a view of the glottis.

MM. Trousseau and Belloc, in a treatise on Laryngeal Phthisis, which was published in the year 1837, refer to a *speculum laryngis*. It was made by a M. Selligie, an ingenious mechanic, who had himself suffered from laryngeal phthisis. The instrument consisted of two tubes, through one of which the light was thrown on the glottis, while through the other the image of the glottis was reflected from a mirror placed at its guttural extremity. The authors state that the instrument was very difficult of application, and that not one person in ten could bear its introduction.

The late Mr. Avery worked long and successfully in the construction of a laryngoscope and other instruments for the examination of internal organs, but he published nothing on the subject.¹

In the year 1844, the late Dr. Warden invented a prismatic speculum, with which he succeeded in seeing disease of the glottis in two cases.²

It is a well-known fact that the first experimenter who succeeded in obtaining a view of his own larynx is a distinguished professor of music in this town, M. Garcia.

M. Garcia had long studied the anatomy and physiology of the larynx as the organ of the voice, and he had a great desire to see the movements of the living larynx. At length he attained the desired object by a very simple plan. Standing with his back to the sun, he held a looking-glass in his left hand before his face; the sun’s rays were reflected by the glass into his open mouth. Then he introduced a dentist’s mirror, previously warmed, into the back of his mouth, and thus he saw the reflection of his larynx in the looking-glass.

M. Garcia gave the results of his observations in a very interesting paper, entitled “Physiological Observations on the Human Voice,” which was published in the “Proceedings” of the Royal Society in the year 1855. This paper was destined to be the germ of further important observations and discoveries. It became known to Dr. Türk, of Vienna, and it induced him to use the laryngeal mirror in the wards of the general hospital there during the year 1857.

¹ Introduction to the Art of Laryngoscopy. By Dr. Yearley. 1862.

² British and Foreign Medical-Chirurgical Review, Jan. 1863, p. 210.

Towards the end of that year Dr. Türk lent his mirrors to Dr. Czermak, who set to work with great zeal and energy. He soon made the important step of adopting the large ophthalmoscope reflector as a means of concentrating artificial light, thus making the laryngoscope available at all times as a means of inspecting the larynx, and of guiding the hand in the application of local remedies. Czermak soon saw, as he says, the practical value of the instrument, and he has been most energetic and most successful in his efforts to secure its recognition by the whole civilized world.

It appears to me that, without injustice to those who had preceded him—Garcia's claim to originality in the matter of auto-laryngoscopy being obviously quite distinct and indisputable—Czermak may be considered to be the discoverer of the art of laryngoscopy in its application to the diagnosis and treatment of disease. He was also the first to practise the kindred art of rhinoscopy.

Sydney Smith, in discussing the rival claims of discoverers, has said, "That man is not the first discoverer of any art who first says the thing; but he who says it so long, and so loud, and so clearly, that he compels mankind to hear him—the man who is so deeply impressed with the importance of his discovery that he will take no denial; but, at the risk of fortune and fame, pushes through all opposition, and is determined that what he thinks he has discovered shall not perish for want of a fair trial." On grounds such as these—not of priority in time, but of persevering and successful efforts to render the method practically available—Czermak has established strong claims to be considered the discoverer, as he has unquestionably been the great improver and the great teacher, of the arts of laryngoscopy and rhinoscopy, in their application to the diagnosis and treatment of disease.

I propose now to describe the method of using the laryngoscope.

And first, as to the mode of illuminating the throat. The plan which is generally adopted is to reflect the light of the sun or of a lamp into the throat by means of a concave mirror, which is fixed on the forehead or in front of one eye of the operator.

The operator always sits opposite to the patient. When sunlight is used, the patient is placed with his back to the sun. When

a lamp is employed, it is placed usually to the right side of the patient's head, and on the same level, or a little above. In using artificial light, it is unnecessary to darken the room more than may be done by simply drawing down a blind, so as to lessen the glare of daylight. Now the question arises, should the reflector be perforated and placed in front of one eye, so that we look through it into the patient's throat, or is it better placed on the forehead just above the eyes? In which case it is unnecessary to have the mirror perforated. I believe that the best position for the reflector is above both eyes, and not in front of one, and as this is a point of considerable importance, I must give the reasons for my belief.

With the reflector on the forehead, we avoid the discomfort and inconvenience resulting from the effort required to keep one eye applied to the opening in the mirror. We have the free and unimpeded use of both eyes, and we consequently find it much easier to direct the light into the patient's throat, to introduce the laryngeal mirror, and to practise any other manipulation that may be required, either for diagnosis or treatment. Another incidental advantage attending the position of the reflector on the forehead is, that we thus get a more extended movement of the reflector in all directions. This free movement enables us readily to change the direction of the light when we are examining our patient, and it also facilitates a very simple mode of auto-laryngoscopy, of which I shall presently have to speak. The question, then, arises, are there advantages to be gained by looking through a perforated reflector which in any degree compensate for its manifest inconveniences? I know of none, and I believe that none exist. The practice of using a perforated reflector was borrowed from the ophthalmoscope; but the conditions which attend the exploration of the interior of the eye through the small opening of the pupil are very different from those which exist when we are looking through the wide open mouth at an image of the larynx reflected from a mirror of considerable size. In the latter case there is nothing gained by looking through the centre of a perforated reflector. I have fully tested this, not only in the examination of the larynx, but also by an experiment of this kind. Place a stethoscope with the

ear-piece downwards, on the table in front of you. Hold a laryngeal mirror obliquely over the upper end of the stethoscope, so as to reflect the interior of the tube, throwing the light of a candle on the mirror, by means of the concave reflector placed at one time on the forehead, at another in front of one eye. You will find that, as regards the facility of illuminating the interior of the tube, and seeing its image in the mirror, the position of the reflector makes not the slightest difference.

I have met with very few persons who, having tried both methods, fail to appreciate the great convenience and advantage of having the reflector on the forehead, rather than in front of one eye. Some who have become accustomed to the latter plan are unwilling to change it. Czermak not only keeps the reflector in front of the right eye, but he holds the apparatus between his teeth—a practice in which he has found very few imitators. M. Garcla¹ states with regard to the use of a perforated mirror, that he tried it in order that Drs. Sharpey and Williamson might observe his larynx while he experimented upon himself. He found, however, that this was not attended by any marked advantage. They could see the reflected image of his larynx as well by looking over the top of the mirror, as by looking through its perforated centre.

I made the same observation when looking into Czermak's throat while he was using his auto-laryngoscopic apparatus; I could see his larynx as well by the side of the reflector as through its centre. When I am examining the larynx of a patient, if I wish to make the parts visible to another, I can readily do this by turning the face of the laryngeal mirror slightly towards one side, and directing the observer to look over my shoulder at the mirror in the throat. In order to see the image of the larynx it is unnecessary that the eye should be even near the margin of the reflector, much less is it necessary that the eye should look through the centre of the reflector.

The reflector when in front of the eye, therefore, being a source of much discomfort and inconvenience, without any compensating advantage, is better placed on the forehead just above the eyes.

The faucial or laryngeal mirror is made of different forms—square with the angles

rounded off, circular, or oval. The form of the mirror is of little consequence. I find, however, that a circular mirror irritates the back of the pharynx less than a square one; I, therefore, prefer the circular form. Silvered glass mirrors are to be preferred to those made of steel or other metal. Metallic mirrors soon lose their polish, and they quickly cool, and thus become dimmed by the breath.

The mirror is to be warmed by holding it over the lamp or by dipping it into warm water. Its temperature should be tested by bringing it in contact with the cheek or the hand of the operator. It should be warm enough to prevent its being dimmed by the patient's breath. There are two reasons for not overheating the mirror—first, the patient's mouth will be burned; and, second, the silvering of the mirror will be spoiled.

The mirror is to be held like a pen, between the thumb and two fingers, and introduced so as to slightly raise the uvula and soft palate. Care must be taken to avoid touching the tongue, and as much as possible the back of the pharynx, with the mirror, these being the most sensitive parts within the mouth. The hand of the operator may be kept steady by resting the third and fourth fingers on the chin of the patient.

I have said that we must not touch the tongue with the mirror; but how is this to be avoided? You will find that very generally, as soon as the mirror is introduced between the teeth, the tongue involuntarily rises towards the roof of the mouth, so as to come in contact with the mirror, and obstruct the view; and, in fact, the tongue is one of the most frequent and most serious impediments in the way of laryngoscopy. There are various modes of dealing with this unruly member.

In some few cases the patient has sufficient control over the tongue to hold it down by a voluntary effort, while the laryngeal mirror is being introduced. This power, however, is rarely acquired until after a considerable amount of practice, and in most instances the tongue has to be kept out of the way by some mechanical means. The plan which usually succeeds best is to hold the tip of the tongue between the thumb and the forefinger, and to draw it gently forward over the lower teeth. This may be done by the operator with his left

¹ Notice sur l'Invention du Laryngoscope, par Paulin Richard. Paris, 1861. p. 14.

hand, or by the patient, the thumb and finger which hold the tongue being covered by a cotton glove, or by a towel or handkerchief.

In some cases a *metallic tongue depressor* may be used with advantage, or the tongue may be pressed down by the forefinger of the operator's left hand. But it will usually be found that one effect of depressing the tongue in front is to push it backwards at the base, so that it nearly or quite touches the back of the pharynx, thus intercepting the light; while another effect is to make the tongue arch upwards, so as nearly to touch the roof of the mouth. This arched position of the tongue obstructs the passage of the light to and from the larynx; often, too, it brings the tongue in contact with the mirror, and this excites nausea. For these reasons, the attempt to depress the tongue is usually less successful than its gentle traction forwards.

I have before said that the laryngeal mirror is to be introduced so as slightly to raise the uvula and soft palate. The uvula must not be allowed to project below the mirror. The end of a long uvula, hanging below the mirror, has its image reflected in the glass, and this obscures the view of the larynx. The uvula and the soft palate are the least sensitive parts with which the mirror can come in contact. The posterior wall of the pharynx is usually more sensitive, and care should be taken to disturb it as little as possible. Frequently, however, the pharynx bears the touch of the mirror as well as the uvula and soft palate.

The mirror being placed in an oblique position below the palate, we usually at once obtain a view of the larynx. A little practice will enable you to make such changes in the position of the mirror, or of the patient, or in the direction of the light, as may be required to bring the parts fully into view. It should be borne in mind that the larynx, as it appears in the mirror, is reversed; so that we get the same view as we have when, examining the larynx after death, we look at it from behind. The arytenoid cartilages are nearest to the eye; the insertion of the vocal cords into the thyroid cartilage is more distant. We also see the anterior wall of the trachea as if we were looking into the tube from behind. We see that during inspiration the glottis is a wide triangular opening of considerable size, the vocal cords being of a pearly white

colour. During speaking—as in pronouncing the syllable “eh”—the glottis closes, and the cords vibrate with the impulse of the expired air.

It is important to practise the introduction of the laryngeal mirror with the left hand as well as with the right. In applying local remedies to the larynx the patient is instructed to manipulate his own tongue, while the operator, holding the mirror with the left hand, so as to obtain a view of the larynx, uses his right hand for the introduction of the brush or other instrument.

But how does the throat bear the contact of the mirror? Does not its introduction excite retching and cough and dyspnoea, and other unpleasant sensations? These questions are often asked by those who have had no experience of laryngoscopy; but those who have experience are unanimous in declaring that, in the great majority of cases, none of these unpleasant results attend the introduction of the mirror into the fauces. In some instances, however, we meet with difficulties in the use of the instrument. I will briefly refer to some of these, and will give some hints as to the best mode of meeting them.

First, then, some persons have a propensity to throw the tongue forcibly upwards towards the roof of the mouth; and they do this with a provoking pertinacity just as the mirror is being introduced between the teeth. This position of the tongue offers a serious impediment to the introduction of the mirror, and the obstruction is greater in proportion to the size of the rebellious tongue. It is usually a result of nervousness on the part of the patient, and is sure to be made worse by any appearance of petulance in the operator. The better plan is to endeavour to reassure the patient. Sometimes the occupation of holding his own tongue has a good effect by diverting his attention, and occasionally, while he is holding the tip of his tongue, you may depress the dorsum with a spatula or with your finger. In some instances, after making one or two attempts, it is better to defer examination to a future day. After two or three sittings, there is usually less nervousness, and the tongue comes more under control.

[Dr. Watson, after hearing this lecture, told me that in the case of patients who have this tendency to arch up the tongue, and so to prevent the examination of the

fauces, he directs them to practise by sitting in front of a looking-glass, with the mouth open. The inspection of the tongue, while they are endeavouring to acquire the power of controlling its movements, is found to be a great assistance.]

Another impediment to the examination of the larynx results from unusual sensitiveness of the fauces, so that the touch of the mirror excites contraction of the pharynx and retching. This excessive sensibility is common when the fauces are in a state of inflammatory congestion; so that, seeing the throat engorged and red, we may anticipate a difficulty in the examination of the larynx. There are two modes of lessening the sensibility of the throat in such cases. One is, to direct the patient to keep a lump of ice in his mouth for ten or fifteen minutes before the examination, and as the ice melts to swallow the cold water. Another, and I think a more effectual plan, is to put twenty drops of chloroform on a handkerchief, and let him inhale it for a minute: I have found this successful in quieting the most irritable throats, and that without rendering the patient in the least degree drowsy or uncomfortable. The bromide of potassium, when swallowed or used as a gargle, has long been supposed to have the effect of lessening the reflex sensibility of the fauces, but in the few cases in which I have tried it for this purpose it has appeared to be quite inert: Smeleder states, too, that he has not obtained the desired result from this salt.

It will usually be found that the repeated introduction of the faucial mirror, at intervals of a day or two, has the effect of lessening the sensibility of the throat, so that after a short time the most sensitive throat becomes tolerant of the mirror.

I have found that patients labouring under acute laryngitis and other organic diseases, which are attended with much suffering, usually bear the examination well, and often better than others who have but trifling ailments or none at all. The man who is threatened with suffocation will submit to any proceeding which affords him hope of relief, and the distress in his larynx is so great that he is scarcely conscious of the trifling irritation caused by the faucial mirror; so true is it that

"Where the greater malady is fixed
The lesser is scarce felt."

Enlargement of the tonsils may render

the examination of the larynx difficult or impossible. A small mirror may be used when the enlargement is not excessive; but if the tonsils are so much enlarged as nearly to touch each other, a laryngoscopic examination is impracticable.

The epiglottis is sometimes very long, and projects obliquely downwards and backwards, so as to make it impossible to throw the light beneath it, and to get a view of the larynx. The arch of the epiglottis, too, is sometimes so contracted as to obstruct the entrance of the light.

Smeleder¹ gives as the result of his experience that in about 25 per cent. of adults, he got a perfect view of the larynx easily at the first examination; in about 5 per cent. it was impossible to see the larynx at all; in the remainder he succeeded more or less completely after repeated examinations. In children from two years of age and upwards, the proportion of failures is much greater.—*Lancet*, May 31, 1864.

(To be continued)

HOSPITAL NOTES AND GLEANINGS.

Left Hemiplegia, with Loss of Speech and Epileptic Convulsions—Recovery.—This case is forwarded to us as an instance of loss of speech, with hemiplegia on the left side. As a rule, when speech is lost, the hemiplegia is on the right side, and to this rule we have seen but one exception. It must be kept in mind that the following case, in degree at least, differs widely from those previously recorded by Dr. Hughlings Jackson and others as loss of speech with hemiplegia on the right. Moreover, the case is scarcely one of pure hemiplegia on the left, as the patient had at first weakness of both legs. Again, it seems that voice, as well as speech, was affected, so that the case altogether is rather a complicated one. Here, however, are the facts as recorded by an excellent observer, Mr. Dunnett Spanton:—

Alfred L., aged 22, single, potter; admitted into the North Staffordshire Infirmary, under Dr. Gooday, August 12, 1864.

Family History.—Father, a labourer, died at the age of 46 from "liver complaint;" mother at age of 56, from cancer. Three brothers died young, from convul-

¹ Die Laryngoskopie und ihre Verwerthung für die Arztliche Praxis. Von Dr. Friedrich Smeleder. Wien, 1863.

sions; one sister at age of 14, from fits, which she had from infancy. Three brothers and a sister living, older than Alfred L.; one rheumatic, none had fits. Paternal grandparents long-lived; maternal died early. One uncle "asthmatic."

Previous History. Healthy when a child. Since he can remember has been laid up only once, about twelve months ago with a bad foot. Has worked as a potter since the age of 15, being for a few months in the "dipping-house,"—i. e., dipping the ware into the glaze containing lead. Never suffered any ill effects from it. Always lived well. During the last year has been in the habit of drinking beer to excess, getting drunk once or twice a week. Never had syphilis.

History of Illness.—On Friday, May 20th, the patient saw a young woman in a fit, and attempted to carry her out. While doing so, he says he fainted, and lost consciousness until the following Tuesday, when he felt weak and was unable to walk.

The arms were unaffected. He had frontal headache; did not lose his voice; during the fit was convulsed. Was attended by a doctor, who blistered him and leeches the temples. Kept in bed three weeks, and at the end of that time could walk with some assistance, dragging both legs. The fits recurred frequently, never with a longer interval than nine days. In a fit about five weeks after the first he lost speech entirely for an hour or two, then was able to speak in a whisper. At the same time lost sight for three days, and the eyes remained "weak" some time. He regained the use of the right leg, but the left remained paralyzed up to the time of admission. For six days before admission the fits came on very frequently, lasting usually three or four hours. The left arm became affected about a week before; headache was severe and constant, chiefly frontal. Had constipation and anorexia; no retention or incontinence of urine.

On Admission.—Height, 5 feet 6 inches; well developed; hair light; eyes gray; no marks of struma or syphilis; countenance florid, not flushed; unable to walk without assistance, dragging left leg, and unable to use left arm; right side unaffected; pupils of moderate size, equal, sensitive; sight good except when fits occur; much severe frontal headache; intellect clear during interval of the fits; occasional vertigo; no

diplopia; voice scarcely audible, after a fit quite lost; memory very bad, so that sometimes he is unable to find words to express clearly his meaning, but makes himself understood by signs. Mouth slightly drawn to left side; tongue deviates a little to right side, furred, and moist; bowels confined; appetite poor; pulse slow, regular, soft, moderately full; heart sounds normal; breath sounds also; skin moist, warm; left side feels colder to the patient; no incontinence of urine.

Ordered broth diet, a blister to the nape, and white aperient mixture.

August 13. Had a fit soon after admission, lasting three hours. During the fit there was clonic spasm of the left arm and leg, the mouth drawn to left side, moving constantly; jaws quite fixed, so that he could not separate the teeth at all; insensible and speechless; pupils dilated, left larger than right. Ordered an aloetic enema.

From this time the fits recurred about once in three days, similar in character to the one described. After a fit he complained of much frontal headache; his memory was much worse. There was trismus for several hours usually, and when this passed off he was still almost speechless.

29th. Ordered iodide of potassium and sarsa, and full diet.

September 3. Had several violent fits, with very little intermission, lasting several hours. During the fit both sides of the body much convulsed, the left always worse. Trismus lasted for upwards of twenty-four hours, and he was speechless for a longer period, being able afterwards to reply in a low whisper. Never said "no" for "yes," but was at times at a loss for words. Ordered to take one-sixteenth of a grain of bichloride of mercury in decoction of bark thrice daily.

9th. A seton was put in the nape. From this time the patient gradually improved; had no fit; speech slowly returned, and headache entirely ceased.

30th. Able to walk well without any dragging; quite free from pain; speech and voice better than for many weeks; all paralysis gone.

On October 8th, left the Infirmary well.

Since the above report was written, the patient has returned on account of some more fits having occurred, but comparatively

slight. He is still under observation.—*Med. Times and Gaz.*, Dec. 10, 1864.

MEDICAL NEWS.

DOMESTIC INTELLIGENCE.

Ligature of the Common Carotid Artery.

—Wm. B. REYNOLDS, Surgeon 2d U. S. Sharpshooters, reports (*Boston Med. and Surg. Journ.*, Nov. 24, 1864) the following case:—

"Private J. P., 120th N. Y. Vols., was admitted to hospital, Sept. 9th, 1864, having received a gunshot wound of the face and neck, the ball entering just behind the sterno-cleido-mastoideus muscle, and about one inch below the level of the thyroid cartilage, cutting in its way some fibres of the muscle, and making its exit just below the left eye. The ball, in its passage, cut an opening in the roof of the mouth, one and a half inch in length and about three-fourths of an inch in breadth. There was severe arterial hemorrhage from the anterior and posterior nares, from the wound in the roof of the mouth, and from the wound below the left eye. I proceeded immediately to plug the several passages with lint saturated with the liquid persulphate of iron, but could not by this means control the hemorrhage. Chloroform was administered, and I immediately proceeded to ligate the artery. There was nothing unusual in the mode of operation, and the artery was ligated just below the bifurcation. After the ligature was carried beneath the artery, I allowed the patient a few moments to recover from the effects of the anæsthetic, and after he had partially rallied I tied the artery. He became comatose immediately, but soon rallied on applying ar. spts. ammonia freely to the face. On rallying, his pulse was 100 per minute.

The three succeeding days his pulse was 120. The reaction was very severe, but during all this time he maintained his mental faculties. After the third day the reaction grew less, until, on the twelfth day his pulse numbered only 72. On the sixteenth day the ligature came away; the incision for securing the artery was very nearly closed, and the wounds made by the ball were doing remarkably well.

Oct. 6th, twenty-six days after the operation, he writes me that he has nearly

recovered from the effects of the wound and the operation."

American Medical Association.—The Committee of the American Medical Association to which was referred, at its late Annual Meeting, the subject of "Spotted Fever—so called," earnestly solicits from members of the profession in different parts of the country information respecting the history, phenomena, and treatment of this disease as it has come under their own notice.

As it is interesting to know the geographical distribution of this disease, intelligence respecting it from physicians in distant States, and from medical officers of the army is particularly requested.

For the sake of uniformity the following questions have been prepared. Any facts not included in or suggested by them will, with the answers themselves, be gratefully appreciated and acknowledged by the Committee.

Address the Chairman of the Committee.

Dr. JAMES J. LEVICK,
1109 Arch St., Philadelphia.

1. When did the "Spotted Fever—so called," appear in your neighbourhood, and how long did it prevail there?
2. What were the usual symptoms of the disease, and what unusual symptoms occurred in your practice?
3. Did it attack many individuals at the same time, and was any class of persons especially liable to it? Was it materially modified by the age, sex, or temperament of the patient?
4. What was the ordinary duration of the disease, and were relapses or second attacks common?
5. Are you in possession of any proof that this disease was communicated from one person to another?
6. What appeared to be the predisposing and what the exciting causes of the disease?
7. What complications and what sequelæ of this disease came under your notice?
8. What other diseases prevailed at or nearly the same time as spotted fever did, and have any epidemic diseases followed it?
9. What was the proportion of deaths to the whole number of persons attacked, and what was the usual manner of fatal termination?

10. What was your mode of treating this disease?

11. What were the *post-mortem* appearances?

12. What microscopical observations were made, and what were their results?

13. Has this disease prevailed in your neighbourhood in former years?

Medical journals please copy.

Mütter Lectures on Surgical Pathology at the College of Physicians of Philadelphia.—The College of Physicians has appointed Dr. J. H. Packard to the Mütter Lectureship on "Surgical Pathology." The first course will be delivered by that gentleman in the Hall of the College of Physicians, 13th and Locust Streets, commencing on the evening of Tuesday, January 3, 1865, and continuing on the evening of the same day of the week, until the entire course, comprising ten lectures, shall be completed. *Subject:* Inflammation—its varieties and results. Tickets for the course, each five dollars to all but Fellows of the College.

Berkshire Medical College.—At the late annual commencement the degree of M. D. was conferred on 16 candidates.

Medical College of Ohio.—The faculty of this school has been reorganized. The chairs are occupied as follows:—

Surgery, Geo. C. Blackman, M. D.

Medicine, James Graham, M. D.

Obstetrics, M. B. Wright, M. D.

Institutes, C. G. Comegys, M. D.

Anatomy, Wm. H. Gobrecht, M. D.

Chemistry, Roberts Bartholow, M. D.

Materia Medica, Theophilus Parvin, M. D.

Dr. Marion Sims.—We see it stated that our former contributor, Dr. Sims, who has for the past two years been residing in Paris, has received from the Emperor of the French the knighthood of the Legion of Honour, in recognition of his eminent services in surgery, and his skill and success in his particular department of practice.

FOREIGN INTELLIGENCE.

Physiological Study of Opium.—M. BERNARD has made an interesting communication to the French Academy, entitled "A

Physiological Study of Opium and its Principal Alkaloids." He has experimented with morphine, narceine, codeine, narcotine, papaverine, and thebaine. He has found that the three first of these only are soporific, each of them producing sleep in its own particular way; and that the three last have toxic effects. Opium, therefore, is a mixture of many substances, whose properties, as regards their action on the body, are different. Opium, indeed, probably contains other substances besides those here enumerated. M. Bernard, in his experiments, administered the alkaloids in the form of hydrochlorates, and by injection into the cellular tissue. By this means the absorption of the active principle is more regular than when introduced into the stomach, and the results obtained are more sure and trustworthy. His experiments were made on dogs, cats, rats, frogs, sparrows, etc. The effects produced were always alike, due allowance being made for the different degrees of sensibility of the animals operated on. Morphine, he found, is a more profound soporific than codeine, and narceine was intermediate in power. MM. Debout and Béhier have, it appears, lately studied the action of narceine on man, and will shortly publish the results of their researches. All the bodies extracted from opium are toxic. Thebaine is most especially so; next stands codeine. Hence it follows that physicians err in prescribing larger doses of codeine than of morphine. Two or three centigrammes of codeine injected into the veins of a dog, kill it rapidly. All the alkaloids of opium, with the exception of thebaine, produce convulsions.

Elimination of Medicaments with the Perspiration.—In a late number of the *Archives Générales de Médecine*, MM. BERGERON and LEMAÎTRE treat of the question of the elimination of medicaments with the perspiration. M. Lemaître studied the matter in the wards of M. Cazenave, where he had large opportunities of observing cases in which vapour-baths and arsenic and mercury were employed. The perspiration of patients subjected to arsenical and mercurial treatment was carefully collected, and as pure as possible, for examination. Nine patients were experimented upon. Of these, seven suffering from psoriasis were treated, two of them with arsenite of potash, two with arsenite of soda, two with arsenite of

iron, and the other with bichloride of mercury; the eighth was treated with iodide of mercury, and the ninth with iodide of potassium. The results obtained were as follows: The arsenites of potash and soda are eliminated as such; the arsenite of iron is decomposed, the iron being eliminated from the kidney; and the arsenic in an alkaline form from the skin. The protoiodide of mercury is eliminated; traces of mercury are found in the perspiration, and iodine in the saliva and urine. Bichloride of mercury is found in the sweat, and traces of it also in the urine. In a case of albuminuria these observers found no albumen in the sweat, but in a case of diabetes they found in it a large quantity of sugar.

Transformation of Urea into Carbonate of Ammonia in the System.—Dr. PETROFF (Virchow's *Archiv*) has repeated Frerichs's observations respecting the transformation of urea into carbonate of ammonia in the system. He removed the kidneys of dogs and cats, to produce uræmia; and then examined the blood, taking all possible precautions to prevent errors. The results are—that when the function of the kidneys is suppressed, carbonate of ammonia is formed in the blood; that injections of carbonate of ammonia into the blood produce phenomena precisely similar to those of uræmia; that the degree of intensity of the symptoms produced, and their character, depend upon the quantity of ammonia contained in the blood, and upon the state in which it exists in the blood.—*British Med. Journal*, Oct. 8, 1864.

Vaso-Motor Nerves.—The discovery of the vaso-motor nerves is of recent date. In 1852, M. Bernard showed that, after section of the cervical portion of the sympathetic, the temperature on the side injured was increased. Dr. Brown-Séquard subsequently proved that the increase of heat was the direct consequence of dilatation of the blood-vessels and of the increased flow of blood into them. Thus it was shown that certain nerves preside over the contraction of the arteries, and on this fact Dr. Brown-Séquard founded his theory of reflex paralysis. The Academy of Sciences has also lately rewarded M. Cohen for his researches into vaso-motor neuroses. M. Pontevex, in a thesis, has lately given a complete résumé of the whole subject. The theory of the

vaso-motor nerves is, as he says, a doctrine pregnant with important results, destined to revolutionize the practice of medicine. Thus, for example, the febrile state, heretofore supposed to be a state of excitation, is by this theory shown to be a state of weakness. The hot and red skin is produced by relaxation of the bloodvessels, just as it is produced after division of the sympathetic. Paralysis of the vaso-motor nerves produces congestion, their excitation removes it, and their destruction determines suppuration. In these facts we have a physiological and modern key to the character of inflammation.—*British Med. Journal*, Sept. 17, 1864.

Capacity of the Lungs.—M. GREANT asserts that the results concerning the capacity of the lungs, obtained through experiments on the dead body, are never correct. The pulmonary capacity depends upon the elasticity of the diaphragm and of the walls of the thorax; and this elasticity does not exist after death. He therefore determines the pulmonary capacity by the inhalation of hydrogen. Hydrogen, on the least inspiratory effort, penetrates into the smallest bronchia. By analysis of the expired gases, he obtains the capacity of the lungs.—*Brit. Med. Journal*, Oct. 22, 1864.

Demonomania.—M. DELUEN reported the following curious case to the Academic Society of "La Loire Inférieure."

A woman was admitted into the hospice de Saint-Jacques, labouring under demonomania; she imagined that she had been got with child by the Devil; the diagnosis made was encysted dropsy of the ovary; it so happened, however, that one night she was delivered of a child which the attendants had great difficulty in preventing her from strangling. From that time, her insanity disappeared.—*Revue de Thérapeutique*, Dec. 1, 1864.

Putrid Infection.—It is much to be desired, says M. BATAILLIE, that the theory of acute putrid infection were adopted in the interests of our hospitals, of our patients, and of the army. A great example has just been set in this way by one of our most celebrated surgeons. *L'Hôpital des Cliniques* has the worst repute for healthiness of all the Parisian hospitals. There especially are observed the severest epidemics

of purulent infection, so that it might almost be said that this terrible affection is endemic there. Professor Nélaton, and his assistant there, M. Houel, have completely given up the surgical doctrines of the schools. They have excluded from their practice ointments, emollients, etc. They now employ *antiputrescents*, and almost solely that which is the type of them, strong spirits; and, besides this, they give their patients, after operations, eatables and drinkables. This has been their practice for fifteen months, and during this period there has not been in this hospital a single case of purulent infection, and, in fact, this hospital is now the healthiest in France; and all this without moving a stone, taking out a nail, or spending a sou.

Enucleation of Eyes.—We cannot but congratulate the profession upon the numerous ophthalmological critics, reviews, &c., which have lately sprung into life. Ophthalmic surgery and diseases of the eye have been, during the few past years, studied with remarkable industry; and, as every one knows, very great differences in opinion and in practice have been the not unnatural result. A critical study of the new practices and proposals of the day will necessarily lead to the separating of the wheat from the chaff; and will, no doubt, one day bring us to something nearer settled rules of practice than we have arrived at at present.

The subject of what, in modern language, is called the Enucleation of the Eye is one, amongst others, which would, we cannot but think, be the better for a little canvassing. This operation, once so rarely performed, and still so rarely performed by many eye-surgeons, appears in the practice of some of our modern ophthalmological authorities, an affair of what we may call every day occurrence. Either in connection with, or coincidentally with, or as a mere sequence of, iridectomy, has enucleation of eye become, in some hands, quite a common operation.

We, of course, offer no opinion as to the value of the operation in itself, or as to its desirability or rather necessity as a daily operation; but we cannot but note this very important fact, plain to every one; viz., that the practice of some eye-surgeons in this respect is in direct opposition to, and, therefore, in some sense a condemnation of, the practice of other eye-surgeons. It

cannot, assuredly, be a matter of indifference to the patient that he should, or should not, have his eye enucleated. The operation must be good or bad for him, a desirable thing or a thing not at all to be desired. But as the practice at present stands, there appears to be no rule to guide the hand of the eye-surgeon; so that, in fact, the enucleation (or otherwise) of the eye will, in a given case, depend entirely upon the school of surgery into whose hands the patient may haply fall. But we must all acknowledge this to be a misfortune; and would all gladly see unity of practice exist upon the point. What, for example, are we to think, and what will the public say, when they meet with facts like the following?

In a translation of Zander on the Ophthalmoscope, the translator, Mr. R. B. Carter, incidentally tells us that he has enucleated at least a hundred eyes. His words are: "I have performed the operation" (enucleation of the eyeball) "more than one hundred times."

Then, on the other side, and as a contrast to this practice, we are informed that not so many as one hundred eyes have been enucleated in the Westminster Eye Infirmary since its foundation.

One single country surgeon, with, of course, a limited experience, has enucleated more eyes than have been enucleated by some eight metropolitan eye-surgeons, at a London eye-hospital, during something like half-a-century of practice!

We are not, let it be understood, venturing to criticize the practice of the Westminster Eye Hospital, or the practice of Mr. R. B. Carter; nor have we any opinion to offer on the point of practice. Our duty and intention are simply, for the sake of science and humanity, to mark the discrepancy in practice, and to call upon those who thus differ on such a very important point to subject their methods to a severe criticism; and so out of opposition to bring unity. As we started off with saying, we now conclude with saying one practice must condemn the other. Both cannot be right; and, therefore, in the meantime, humanity suffers and eye-surgery requires enlightenment.—*British Med. J.*, Nov. 5, 1864.

Treatment of certain Surgical Cases in Tents.—Dr. E. Rose has recently given an account of the experiment that has been

made at the Bethanien Hospital, Berlin, of treating certain surgical cases in tents freely exposed to the air erected in the garden of the establishment. His present report only relates to forty-eight patients so treated between May 25, and September 22, 1863. Its conclusions are highly favourable; for, notwithstanding that there was injudicious overcrowding, no case of pyæmia, gangrene, or tetanus occurred, while there were only a few cases of slight erysipelas. It is not, in fact, the overcrowding of patients and the generation of purulent miasm which give rise to the production of epidemics of pyæmia, but the stagnation of the air and consequent purulent decomposition that ensues. Not only did this evacuation of the bad surgical cases into the tents act beneficially upon themselves, but also upon the condition of the other patients in the hospital—pyæmia, which in former years had been very prevalent, then ceasing to appear in the wards. What sea-air is to the inhabitants of towns, the tent is to the inmates of hospital wards. Patients with suppurative discharges, whose lost appetites no tonic would revive while in the wards, in the tents became so inordinately hungry that their dietary had speedily to be augmented. The general conclusion of the author is that, in spite of some unfavourable weather, and the not very good climate of Berlin, no ill effects resulted, while the influence upon the general health of the patients was most beneficial.—*Med. Times and Gaz.*, Dec. 3, 1864.

Propagation of Puerperal Fever by Accoucheurs.—M. GRIBAR has recently brought this subject before the Brussels Academy of Medicine. The following is M. G.'s personal experience. In December, 1842, he delivered a woman with the forceps, who died of puerperal fever on the second day; and between then and the 19th of the following March, 16 out of 64 women delivered by him were attacked by puerperal fever, 11 of the number dying. As he found the disease did not prevail in the practices of other physicians, he came to the conclusion that he had been the means of communicating the contagious principle of the disease, and therefore took every possible precaution. Until the end of 1862, therefore, for twenty years, he did not meet with another case; but at the end of that year he had a fatal one; and between December

5th and January 26th following, of 9 women delivered by him 8 became the subjects of the disease, and of these 4 died. He had taken every precaution as respects ablutions, clothing, etc., but it was not until after he had suspended practice for a month that the disease ceased to appear among his patients. M. Guérin, commenting upon the above facts, observes that Chomel always called in Baudelocque to his wealthy patients, who unattached to any maternity, he had found to be the only accoucheur of his day in whose practice puerperal fever did not appear; and more than one practitioner, renowned for his knowledge and talent, has acquired among the public a terrible reputation for the calamities which attended his presence. M. Guérin adds that he himself, as well as various other practitioners, have, during the prevalence of epidemics of puerperal fever, experienced symptoms which could only be explained by the presence of a poisonous miasm, and which may doubtless be transported, notwithstanding ablution, change of clothing, etc. Such persons suffer from general uneasiness, fetid breath, eructations of a peculiar odour, and somewhat loose and strong smelling stools. They should observe the greatest cleanliness, freely breathe the fresh air, and repeatedly purge themselves. When the fever occurs in their practice they should make it a solemn duty to abstain for a while from attending other cases.—*Med. Times and Gaz.*, Dec. 10, 1864.

Hospital Hygiene.—MM. BROCA and GOSSELIN having been placed on a committee which gave its approbation to the projected rebuilding of the Hôtel-Dieu, have become the defenders of the project in the Society of Surgery. The latter able surgeon especially stated that he could find nothing to blame in it, except the mode of distributing the buildings. He approved of the large number of beds intended to be provided, and strongly objected to removing the hospitals out of Paris, as highly inconvenient to the patients, their friends, and the medical attendants, and the students. Moreover, he would not admit that the superiority of rural hospitals, although so generally assumed, had been rigorously demonstrated. It is true that country air is purer and more wholesome than that of towns; but it is only an assumption that persons who have always inhabited Paris

would be cured in greater numbers or with more rapidity by being transferred to rural hospitals. It is true that the great operations performed upon the peasantry in small country hospitals are attended with wonderful success; but we have no proof whatever that a like success would be accomplished were Parisians the subjects. At all events, no one will venture to say that epidemic or endemic diseases, as typhoid fever, for example, are attended with less fatality in small country hospitals than in those of Paris. After all, however, notwithstanding the questionable soundness of some of the above opinions, M. Gosselin is not so much at variance with his colleagues as might at first sight be supposed, for he believes that the great thing to secure in a hospital is effectual ventilation. Since he has adopted at La Pitié the "English system" of natural and permanent ventilation, his success with his operations has been surprising, while hospital gangrene, pyæmia and refusal to heal on the part of wounds are unknown in his wards. It is because he believes that in the new Hôtel-Dieu the patients will be distributed in wards containing only a small number of beds, and that each individual will be supplied with from 60 to 65 cubic metres of air, that he gives his support to the plans which have been proposed.

Baron LARREY, in an able discourse, summed up the results of the discussion, and confirmed the importance of many of the conclusions arrived at by the weight of his great experience. The evils of overcrowding he illustrated by the experience of the Crimean war, evils which were entirely obviated during the Italian war through proper sanitary arrangements being put into force. His inspection of the hospitals through entire France has convinced him of the superiority of those which are located beyond the walls of towns over those placed in their midst, and the relative superiority of small hospitals has also been fully proved by means of the small military hospitals which are supplementary to Val-de-Grâce.—*Ibid.*

Endurance of Human Life.—A remarkable instance of the power of supporting hunger has recently occurred at Horsham, near Melbourne, in Australia. Two boys, aged nine and five, and a girl of seven, being sent into the "bush" to gather broom, lost their way, and after a long search, in

which the natives were employed, were discovered sleeping on a clump of broom. They had been eight days and nine nights without food, and with only one drink of water.—*Lancet*, Dec. 10, 1864.

Continued Fever in London.—Continued fever now prevails to a considerable degree, and is on the increase amongst the population of London. A writer in the *Times* says:—

"Ever since the end of 1861 typhus fever has been epidemic in London to an unusual degree. For the three years preceding 1862, the number of patients admitted in this hospital averaged 543 only per annum, while the number admitted in 1862 and 1863 averaged 2402 per annum. Large as this number is, it has been exceeded by the admissions of the present year. From the 1st of January to the 30th of November, 1864, they number 3247. During the month of November alone no less than 345 patients were admitted—a larger number than was ever admitted during the same period at any time since the establishment of the hospital in 1802.

"Although fever is chiefly confined to districts inhabited by the poor, the hospital has not been without its use to localities where the wealthier classes reside, as may be inferred from the fact that 227 domestic servants and 59 shopmen and warehousemen have been removed during the year from private houses and mercantile establishments to the wards of this hospital."—*Med. Times and Gaz.*, Dec. 10th, 1864.

Typhus in Liverpool.—Typhus has become epidemic in Liverpool. At the present time the disease is more prevalent there than it has been at any period since the great outbreak of 1847. Rarely, if ever, is the town entirely free from the malady; but in the autumn of 1862 cases of the disease became more numerous, contemporaneously with the appearance of typhus in Preston and other towns in the cotton manufacturing districts of Lancashire. Since then there has been a gradual augmentation of the disorder, and it has now assumed the proportions of a grave epidemic. Taking the number of patients under treatment at the Fever Hospital as a criterion of the progress of the outbreak, it would appear that between Sept. 1863 and Sept. 1864, the

beds occupied ranged from 60 to 200. Since the latter month the number of patients in the hospital from week to week was as follows:—

39th week of 1864,	207	patients
40th	"	" 262 "
41st	"	" 288 "
42d	"	" 316 "
43d	"	" 345 "
44th	"	" 371 "
45th	"	" 346 "
46th	"	" 336 "
47th	"	" 321 "
48th	"	" 376 "

There is little doubt that the majority of these cases suffered from true typhus. Maculæ and petechiæ were common; but there was less cerebro-spinal disturbance than is usually observed. The number of deaths during the present year has been below the rate of the London Fever Hospital during a period of ten years.—*Lancet*, Dec. 3, 1864.

Establishment for Propagating Cowpox amongst Heifers.—Our readers will probably be interested and surprised to hear that there is an establishment (now fifty years of age) at Naples, where the cowpox is propagated amongst heifers.

The establishment is due to M. Galbiati. The heifer is brought to the door of those who are to be vaccinated. The conductor snips off a pustule with scissors, and presents it in a pair of forceps to the doctor who vaccinates. Vacciniferous cows, M. Palaschiano told the Lyons Congress, are seen going about the streets of Naples just like milking cows. There is a vaccine establishment at Naples; but its operations are confined almost wholly to the poorer classes. Ferdinand II., who supported this establishment, nevertheless had his children vaccinated from the cow; and so also do all those who can afford to pay five francs for the use of the vacciniferous animal. Since the annexation of Naples to Italy, this custom has spread; and, in fact, the cowpox is now generally used in the army and in schools. The propagation of the cowpox has during the fifty years been kept up from cow to cow. Sometimes it has been renewed by matter obtained from England. M. Galbiati, it may be added, has found the affair answer as a speculation. Besides the profit arising from the supply of

matter he has never found any difficulty in the sale of his animals as articles of food.—*Brit. Med. Jour.*, Nov. 12, 1864.

Liquefaction of Protoxide of Nitrogen.—

One of the most interesting objects at a recent *soirée* at the Paris Observatory consisted in the exhibition of the liquefaction of laughing gas, the protoxide of nitrogen, by M. Bianchi. This took place at zero centigrade under a pressure of thirty atmospheres, the fluid issuing in a small jet from a strong metallic reservoir. Received in a glass tube, it retained its liquid condition by reason of the depression of temperature produced by evaporation, so that mercury being introduced solidified, and could be hammered like lead. Simultaneously, a body in the state of ignition, plunged into the atmosphere of the liquid, in which the mercury froze, burnt with a brilliant light. On pouring the protoxide into a small platinum capsule heated to redness, the liquid was found to retain all its properties while assuming the spheroidal state, and was still able to freeze mercury contained in little glass ampullæ. Finally, the liquid protoxide became solidified under the recipient of an air-pump, the temperature being reduced to 120° below zero, Centigrade—the most intense cold yet obtained.

Ozone Tests and Readings.—Dr. ALL-

NATTS says: "I conclude that bibulous paper, saturated with a solution of iodide of potassium and starch or thin arrowroot, affords the most effective tests we possess. The formula of its preparation is as follows: Take of pure white starch 1 ounce, iodide of potassium 3 drachms; mix in a marble mortar, and add gradually 6 ounces of boiling water. The papers to be saturated with the mixture while hot, carefully dried out of contact with the external air, and preserved in close tin boxes." Mr. Lowe remarks: "Assuming that we have adopted the best tests and the most approved method of using those tests, it will be requisite to correct the readings for the velocity of air at the time, for the height of the barometer, for temperature, and for the hygrometrical condition of the atmosphere. It must be borne in mind that if in a given time 1,000 cubic feet of air passing through the ozone-box gives a register of 4, 2,000 feet passing through in the same time will give one of

double that amount. Moisture can also increase or diminish the action, a very dry air or a perfectly saturated atmosphere showing a minimum. The lower the barometer descends, the more ozone is shown upon the tests. In very hot or very cold weather ozone is also at a minimum. With a west there is much more ozone than with an east wind. The maximum amount of ozone will occur with a moderately moist atmosphere, a temperature between 50° and 60°, a barometrical pressure under 29 inches, and a gale occurring at the same time. Before the actual amount of ozone can be ascertained, certain corrections must be applied, and until uniformity is adopted the observations cannot be made comparable. Under these circumstances, we can do little more than record much or little ozone.—*British Med. Journal*, Oct. 22, 1864.

Mortality of Black Troops in the British Service.—There are some thousands of black troops in the service of the crown. In Ceylon the mortality is much lower among the native, than among the white troops; but in the West Indies, where also there are both black and white, it is very decidedly otherwise. In Jamaica the mortality among the black troops was 30.25 per 1 000 of mean strength; among the white troops only 12.81. Mr. O'Flaherty, the principal medical officer in that command, remarks that the black soldier, to outward view, is apparently strong and muscular, but when sick he has comparatively little power of resisting or sustaining disease, and fatal cases of consumption are seldom protracted to the advanced stages commonly observed among European soldiers. It must be borne in mind that the black recruit undergoes a very trying change, on enlisting, from almost complete idleness, and a semi-savage state of existence, to a life of order, regularity, and continued exertion in learning his work during the first two years; the white corps brings no soldiers in the recruit stage. In Jamaica, also, the black troops have much heavier duty than the white, and have been provided with only two meals a day, at 8 A. M. and at noon, leaving them for nearly twenty hours without any regularly provided sustenance; but the medical officer had recommended the addition of an evening meal. The liability of the black troops to consumption is remarkable also in the returns for

West Africa. At the Gambia the deaths from consumption and diseases of the lungs in the four years 1859-62 were as many as 17.64 per 1,000 *per annum*. The mortality from all causes in the year 1862 exceeded 28 per 1,000 at Sierra Leone, the Gold Coast, and Lagos; there are no European troops there to allow of a comparison of mortality.—*British Med. Journal*, Oct. 29, 1864.

Instruction of the Deaf and Dumb.—The instruction of the deaf and dumb in Paris appears to have made great progress.

"In 1853," says M. BOUVIER, "the Academy of Medicine, consulted as to the mode of instruction which should be employed for the deaf and dumb, replied 'that experience had not decided whether education by mimicry or by speech was the best.' During the last eleven years, however, much light has been thrown on the question. Dr. Blanchet, during eighteen or twenty years, has followed a system which was the dream of Itard, and which tends, in the future, to transform the deaf and dumb into deaf only, removing the mutism which accompanies the deafness. For this purpose, all that is necessary is to bring up and educate the deaf and dumb in constant intercourse with persons who speak. This plan is now actually in practice in the Department of the Seine. There is not at the present time a single deaf and dumb child of poor parents who cannot receive in the communal schools of Paris the primary instruction which other children receive, and acquire at the same time a certain degree of the faculty of articulate speech. At Montpellier, Lyons, and Strasbourg similar attempts have also been successfully made. As a guide to teachers, the works of MM. Blanchet and Valade-Gabel have received the sanction of a ministerial commission."—*British Med. Journal*, Oct. 29, 1864.

Homœopathic Globules.—Two children have been brought up at the Wiesbech Police Court, charged with stealing several bottles of homœopathic medicine from the shop of Mr. Finnell. It was said in court that they had eaten the contents of more than 20 bottles without "being either better or worse for it." The children were dismissed with a reprimand.—*Lancet*, Dec. 10, 1864.

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